

11.  
24  
45. The method of claim 44, wherein said period of time is about 48 hours.
- 25  
46. The method of claim 43, wherein said amount comprises between about  $10^3$  to about  $5 \times 10^{12}$  adenovirus particles.
12.  
26  
47. The method of claim 46, wherein said amount comprises between about  $10^3$  to about  $10^6$  adenovirus particles.
13.  
27  
48. The method of claim 46, wherein said amount comprises between about  $1 \times 10^{10}$  to about  $5 \times 10^{12}$  adenovirus particles.
14.  
28  
49. The method of claim 46, wherein said amount comprises about  $1 \times 10^{10}$  virus particles.
15.  
29  
50. The method of claim 46, wherein said amount comprises about  $3 \times 10^{10}$  virus particles.
16.  
30  
51. The method of claim 46, wherein said amount comprises about  $5 \times 10^{12}$  adenovirus particles.
4.  
31  
52. The method of claim 43, further comprising at least a second administration of the adenoviral composition.
17.  
32  
53. The method of claim 52, further comprising at least a third administration of the adenoviral composition.
18.  
33  
54. The method of claim 53, wherein the third administration occurs at least about one day after the second administration.
19.  
34  
55. The method of claim 53, wherein the third administration occurs about one day after the second administration.

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17  
The method of claim 53, wherein said first, second, and third administrations are each given on three consecutive days.

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57.  
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22  
The method of claim 43, further comprising resecting a tumor of said cancer patient.

37  
58.  
7.

22  
The method of claim 43, wherein said resecting occurs prior to said administering.

38  
59.

22  
The method of claim 43, wherein said adenoviral composition further comprises phosphate-buffered saline with about 1% (v/v) glycerol.

39  
60.  
9.

22  
The method of claim 43, wherein said adenoviral composition is delivered in a volume of about 10 ml or less.

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61.

22  
The method of claim 43, wherein the ~~wild-type~~ p53 gene is under the control of a CMV promoter.

10.  
41  
62.  
21.  
42  
63.

22  
The method of claim 43, wherein said growth is prevented by apoptosis.

22  
A method of treating a human cancer patient comprising administering intravenously to said patient an amount of an adenovirus composition effective to prevent growth of malignant cells, wherein said adenovirus composition comprises an adenovirus vector construct comprising a p53 gene, dispersed in a pharmacologically acceptable solution.

43  
64.

21  
The method of claim 63, wherein said adenoviral composition is administered to the patient by intravenous infusion over a period of time.

44  
65.  
22  
33

22  
The method of claim 64, wherein said period of time is about 48 hours.

45  
66.

21  
The method of claim 63, wherein said amount comprises between about  $10^3$  to about  $5 \times 10^{12}$  adenovirus particles.

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32.

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The method of claim 66, wherein said amount comprises between about  $10^3$  to about  $10^6$  adenovirus particles.

33.

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The method of claim ~~66~~, wherein said amount comprises between about  $1 \times 10^{10}$  to about  $5 \times 10^{12}$  adenovirus particles.

24.

48

The method of claim 63, further comprising at least a second administration of the adenoviral composition.

34.

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The method of claim ~~69~~, further comprising at least a third administration of the adenoviral composition. . .

70.

35.

The method of claim 70, wherein the third administration occurs at least about one day after the second administration.

71.

26

The method of claim 70, wherein the third administration occurs about one day after the second administration.

36

54

The method of claim 70, wherein said first, second, and third administrations are each given on three consecutive days.

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The method of claim 63, further comprising resecting a tumor of said cancer patient.

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The method of claim 63, wherein said resecting occurs prior to said administering.

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The method of claim 63, wherein said adenoviral composition further comprises phosphate-buffered saline with about 1% (v/v) glycerol.

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~~56~~  
~~77~~

42 21

The method of claim 63, wherein said adenoviral composition is delivered in a volume of about 10 ml or less.

29.

~~57~~  
~~78~~

42 21

The method of claim 63, wherein the ~~wild-type~~ p53 gene is under the control of a CMV promoter.

30.

~~58~~  
~~79~~

42 21

The method of claim 63, wherein said growth is prevented by apoptosis.

38.

~~59~~  
~~80~~

A method of treating a human cancer patient comprising instilling intratracheally to said patient an amount of an adenovirus composition effective to effective to prevent growth of malignant cells, wherein said adenovirus composition comprises an adenovirus vector construct comprising a p53 gene, dispersed in a pharmacologically acceptable solution.

39.

~~60~~  
~~81~~

38 59

The method of claim 80, wherein said adenoviral composition is administered to the patient by infusion over a period of time.

49.

~~61~~  
~~82~~

39 60

The method of claim 81, wherein said period of time is about 48 hours.

46.

~~62~~  
~~83~~

38 59

The method of claim 80, wherein said amount comprises between about  $10^3$  to about  $5 \times 10^{12}$  adenovirus particles.

41.

~~63~~  
~~84~~

38 59

The method of claim 80, wherein said amount comprises between about  $10^3$  to about  $10^6$  adenovirus particles.

50.

~~64~~  
~~85~~

41 60

The method of claim 84, wherein said amount comprises between about  $1 \times 10^{10}$  to about  $5 \times 10^{12}$  adenovirus particles.

51.

~~65~~  
~~86~~

41 60

The method of claim 84, wherein said amount comprises about  $1 \times 10^{10}$  virus particles.

52.

~~66~~  
~~87~~

41 60

The method of claim 84, wherein said amount comprises about  $3 \times 10^{10}$  virus particles.

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53.

~~47~~  
88.

41  
The method of claim ~~84~~, wherein said amount comprises about  $5 \times 10^{12}$  adenovirus particles.

42.

~~48~~  
89.

38  
The method of claim ~~80~~, further comprising at least a second administration of the adenoviral composition. 42

54.

~~49~~  
90.

58  
The method of claim ~~89~~, further comprising at least a third administration of the adenoviral composition. 54

55.

~~50~~  
91.

54  
The method of claim ~~90~~, wherein the third administration occurs at least about one day after the second administration.

56.

~~51~~  
92.

54  
The method of claim ~~90~~, wherein the third administration occurs about one day after the second administration.

57.

~~52~~  
93.

54  
The method of claim ~~90~~, wherein said first, second, and third administrations are each given on three consecutive days.

43.

~~53~~  
94.

38  
The method of claim ~~80~~, further comprising resecting a tumor of said cancer patient.

44.

~~54~~  
95.

38  
The method of claim ~~80~~, wherein said resecting occurs prior to said administering.

45.

~~55~~  
96.

38  
The method of claim ~~80~~, wherein said adenoviral composition further comprises phosphate-buffered saline with about 1% (v/v) glycerol.

46.

~~56~~  
97.

59 38  
The method of claim ~~80~~, wherein said adenoviral composition is delivered in a volume of about 10 ml or less.

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